

## ENVIRONMENTAL PROTECTION AND ENVIRONMENTAL CONSTRAINTS

### Environmental Protection

The Patapsco/Granite plan area has a wealth of environmental resources from its gently rolling farm fields to its forested stream valleys. Patapsco State Park provides a good habitat for forest dwelling interior birds while farm fields provide a good habitat for grassland birds. There are changes in the bird population when land is converted from farms and forests to residential development. The County's hope for the preservation of a diverse wildlife habitat lies in retaining corridors of forests and farms.

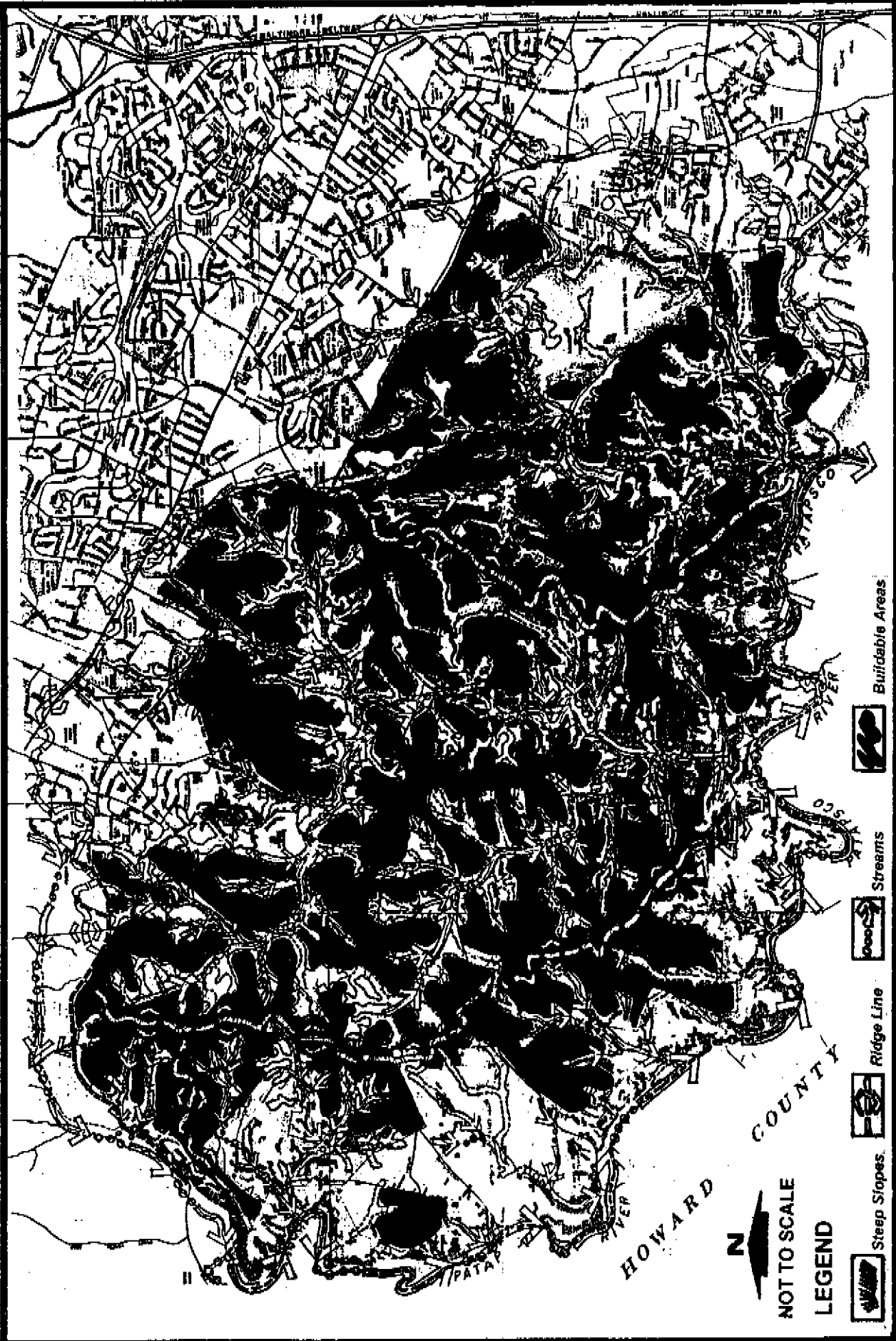
Another area of concern is the safety from environmental hazards of the former Nike sites on Hernwood Road and the former dump on the Woodstock Job Corps property. This matter requires the joint co-operation of County, State and federal agencies to come to a resolution.

A two pronged approach is needed for the protection of environmental resources; a regulatory approach and the voluntary co-operation of property owners and community associations. The regulatory approach involves the following measures:

1. Soil conservation plans and best management practices are required for farms.
2. Since 1969, a sediment control program has minimized soil erosion from development activity.
3. Since 1982, steep slopes and soils with severe limitations for development are protected. Section 26-277 of the Baltimore County Development Regulations states that before any plan or plat may be approved, protective measures must be provided to mitigate the limitations of grading within these steep slopes or unstable soils.
4. Since 1983, streams, 100 year floodplains, and wetlands are protected. Stream buffers of a variable width are required for all streams.
5. Since 1984, storm water management for water quantity and quality is required for the grading of development sites.
6. Since 1988, steep slopes associated with streams and wetlands have been protected. A steep slope analysis and field work occurs during the development review process to determine the extent of the area to be protected.
7. Since 1991, the Forest Conservation Act sets thresholds for clearing and may require reforestation on development sites. (In the RC 5 zone, 25% of the existing forest must be retained, in RC 4, there is a 50% threshold, while there is no threshold in RC 3).

# Patapsco / Granite Area Community Plan

## Summary Analysis Map



The voluntary approach involves citizen and community initiatives in the following:

1. Forest Management agreements can be set up through the Department of Natural Resources. These are 15 year agreements with a tax reduction and a stewardship plan for wildlife protection.
2. Maryland Environmental Trust easements may be established on properties larger than 20 acres with significance as wildlife habitats or for scenic value.
3. Mitigation banks are being set up; shares or rights can be sold to developers who will mitigate for the loss of forest on development sites.
4. Stream clean ups may be sponsored by community organizations with Save Our Streams providing community education.

### **Environmental Constraints**

Many of the landscape features that form the unique rural character of the Patapsco/Granite area also present moderate to severe constraints for development. Ben's Run, Brice's Run, Dogwood Run and Granite Branch with their associated wetlands, 100 year flood plains, and stream buffers traverse the plan area. Ben's Run, Dogwood Run and their tributaries are Use I streams; in stream construction is regulated and prohibited while fish are spawning during certain months of the year. Brice's Run, Granite Branch and their tributaries are Use III streams, i.e. trout streams. Water quality is protected more extensively in Use III streams in order to support trout and the organisms on which they feed. Construction is regulated within the stream and the 100 year flood plain during certain months of the year while fish are spawning.

Additionally, there are significant bands of soils within the plan area with limitations for development of building sites and septic drain fields. It should also be noted that the portion of the plan area located to the east of Ben's Run is underlain by soils derived from the basic gabbro rock formation that has weathered in place. These soils generally have heavy surface clays, perched water table conditions and slow permeability in the subsoil. This combination results in poor percolation tests; where tests are successful, they are often sporadic at best. The portion of the plan area located to the west of Ben's Run is underlain by soils derived from schists, gneisses and granite formations. These soils generally are more favorable for septic disposal areas, having less surface clays and more porous subsoils. However, this area also contains more prime and productive soils, which are well suited for agricultural use. Finally, there are abundant steep slopes and erodible soils in this portion of the plan area.

The summary analysis map, Map 10 A, was prepared by the Office of Planning utilizing 200 scale topographic maps, 200 scale aerial photogrammetric maps as well as the FEMA maps. In a general manner, this map graphically depicts the environmental constraints for development and the areas that have the most development potential. The areas with the fewest environmental constraints are very scattered throughout the plan area. It should also be noted that many of the areas which appear on the map to have development potential are already developed or are located in an area designated for agricultural protection. Lastly, this map is a tool that will be used in combination with agricultural and historic preservation goals to evaluate land use and zoning patterns.

## **Forest Resources**

Baltimore County's Forests have been affected by fragmentation, the reduction of forest interior area, and the introduction of pests, diseases and invasive plant species. Forest harvesting practices without the benefit of today's increased knowledge of forest ecosystem dynamics have left many forested tracts with diminished species diversity as well as a reduction in age classes and vigor. DEPRM is currently developing a Forest Resource Management Plan for Baltimore County and a Geographic Information System (GIS) Methodology for studying forest fragmentation and for locating opportunities for reconnecting forest fragments. The Patapsco/Granite Community Plan will be structured to utilize the information gained from these resource management initiatives and to seek opportunities to increase the vigor and vitality of its forest resources.

## **Patapsco River Watershed Water Quality Management Plan**

Baltimore County DEPRM, in compliance with the United State Environmental Protection Agency's National Pollutant Discharge Elimination System Permit will produce a Watershed Water Quality Management Plan for the Patapsco River Watershed. The plan will be consultant produced with a projected completion date of July 1999. It will involve stormwater runoff quantity and quality modeling of the various land use types and assessment of stream stability. Opportunities for pollutant loading reduction and stream restoration will be identified, analyzed and prioritized leading to a long term action strategy for the Patapsco Watershed in Baltimore County. The Patapsco/Granite Community plan will utilize the results of the Patapsco River Watershed Water Quality Management Plan to assist in land use decisions and restoration efforts.

## **LAND USE AND ZONING**

A sizable part of the Patapsco area is recommended to be designated as a Resource Preservation Area on the Land Management Area Map. This designation is for areas which "have a unique historic, cultural, recreational, and environmental value to the region and Baltimore County in particular". The implication of this designation is that there will be accompanying zoning changes; the density recommended is very low in an effort to preserve the area as a significant resource.

The Patapsco/Granite plan advisory group reviewed major and minor subdivision activity within the plan area from 1981 to the present in an effort to understand the potential for building lots that have been approved by the County but have not yet been built. (See Chart 1.) An overview of the existing zones was also provided. The majority of the land within the plan area, 5550 acres is zoned RC 2, Agricultural Protection. The remaining land is zoned RC 3, Deferred Planning, (3,428 acres) and RC 5, Rural Residential, (2,964 acres). (See Map 12 B.) An as-built density count was

**Chart 1**

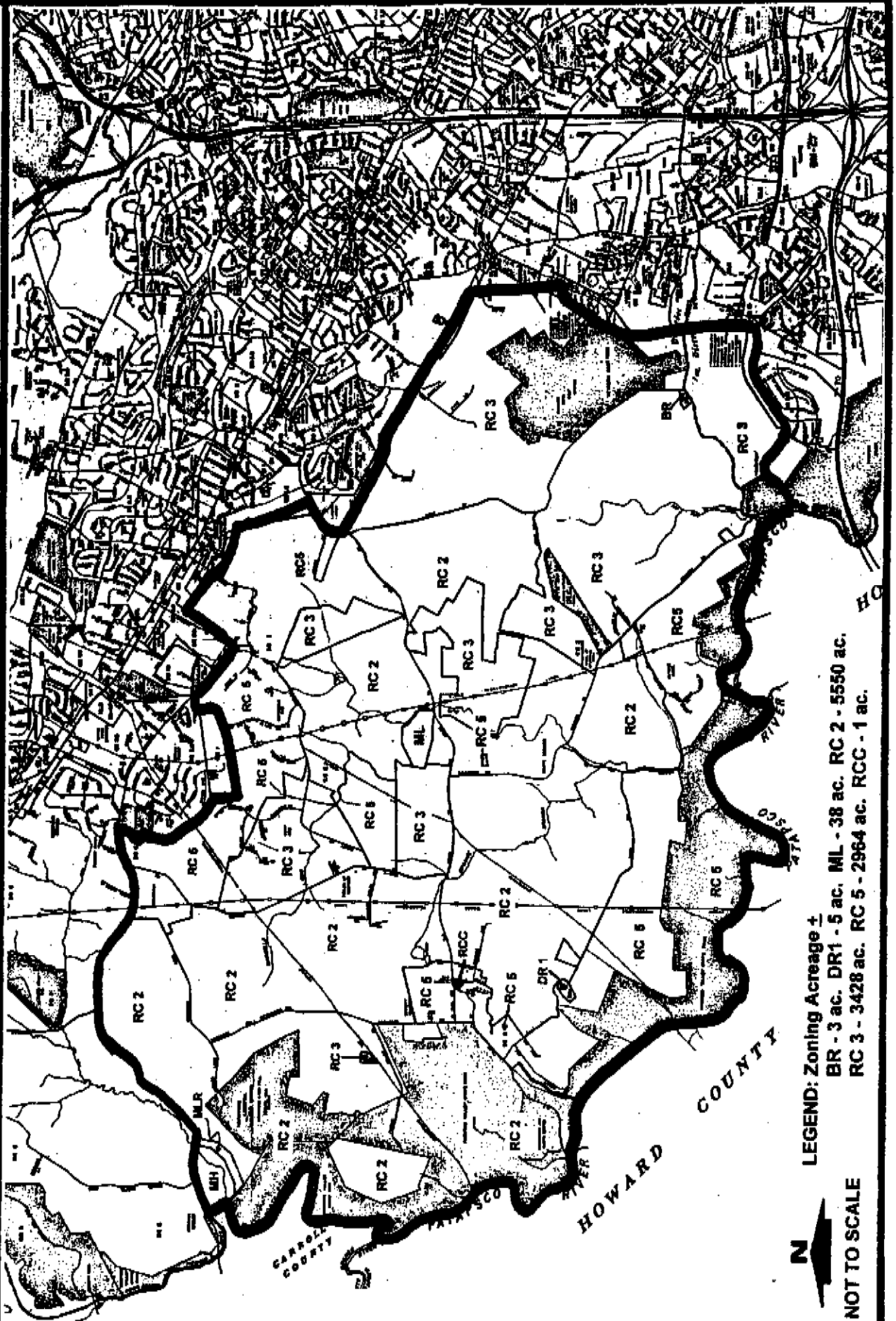
**Development Activity in the Granite Patapsco Study Area  
as of September 30, 1997**

<b>Major Subdivisions</b>			Density	Proposed	Developed	Undeveloped	Average
<b>Development</b>	<b>Zoning</b>	<b>Acres</b>	<b>Allowed</b>	<b>Lots</b>	<b>Lots</b>	<b>Lots</b>	<b>Lot size</b>
<b>Fields of Harvest</b>							
Section 2	RC 3	183.57	55.07	34	34	0	5.40
Section 3	RC 3	60	18.00	18	1	17	3.33
Residue	RC 3	50.34	15.10	1	0	1	50.34
<b>Mardella Run</b>							
Section 1	RC 5	193.2	128.86	64	64	0	3.02
Section 2	RC 5	60.4	40.30	6	6	0	10.07
Shecter Property	RC 3	164.1	49.23	14	0	14	11.72
Autumn Park	RC 5	48.9	32.62	26	19	7	1.88
Offutt Ridge	RC 3	94.52	28.36	28	28	0	3.38
	RC 5	94.32	62.91	49	47	2	1.92
Mahogany Woods	RC 5	27.53	18.36	8	1	7	3.44
<b>Edrich Manor</b>							
Plat 1, section 1	RC 5	40.94	27.31	22	22	0	1.86
Plat 2, section 1	RC 5	18.42	12.29	10	9	1	1.84
Section 2	RC 5	32.7	21.81	19	0	19	1.72
Section 3	RC 5	56.51	37.69	22	0	22	2.57
	RC 2	84.02	2.00	0	0	2	N/A
	RC 3	0.42	0.13	0	0	0	N/A
Meadows of June	RC 5	14.7	9.80	5	1	4	2.94
Polly Hill	<u>RC 5</u>	<u>30.2</u>	<u>20.14</u>	<u>16</u>	<u>0</u>	<u>16</u>	<u>1.89</u>
<b>Total</b>		<b>1254.7</b>	<b>579.98</b>	<b>342</b>	<b>232</b>	<b>112</b>	<b>3.67</b>
<b>Minor Subdivisions</b>							
Woodstock Estates	RC 3	55.7	16.71	2	2	0	27.85
Burham John E.	RC 5	2	1.33	1	1	0	2.00
Brook Farms	RC 2	10.7		4	4	0	2.68
William Greenwalt	RC 5	4.5	3.00	3	3	0	1.50
Land Of Steve Smith	RC 5	34.7	23.14	3	3	0	11.57
Schmidt Meadows	RC 5	9	6.00	6	0	6	1.50
<b>Total</b>		<b><u>116.6</u></b>	<b><u>50.19</u></b>	<b><u>19</u></b>	<b><u>13</u></b>	<b><u>6</u></b>	<b><u>6.14</u></b>
<b>Area Total</b>		<b>1371.3</b>	<b>630.18</b>	<b>361</b>	<b>245.00</b>	<b>118.00</b>	<b>3.80</b>

This chart represents major and minor development activity in the study area as of September 30, 1997. It was developed to give a general idea of what type of development has occurred over the past 15 years.

# Patapsco / Granite Area Community Plan

## Existing Zoning Map



## Chart 2

### Patapsco / Granite Study Area Existing and Potential Build Out (Status Quo Option)

	<b>Total Acres</b>	<b>Public Land</b>	<b>Private Land</b>	<b>Existing Build Out</b>	<b>Remaining Density</b>	<b>Potential Total Build Out **</b>
<b>RC 2</b>	<b>5550</b>	<b>1593</b>	<b>3957</b>	<b>339</b>	<b>211</b>	<b>550</b>
<b>RC 3</b>	<b>3428</b>	<b>244</b>	<b>3184</b>	<b>143</b>	<b>812</b>	<b>955</b>
<b>RC 5</b>	<b>2964</b>	<b>594</b>	<b>2370</b>	<b>473</b>	<b>1107</b>	<b>1580</b>
<b>Total</b>	<b>11942</b>	<b>2431</b>	<b>9511</b>	<b>955</b>	<b>2130</b>	<b>3085</b>

\* Public Land - Federal, State and County owned land as well as land owned by BGE, Consolidated Gas and AT&T was deducted from total acres. Density was computed on remaining privately owned land.

\*\* Potential Total Build Out is based upon gross site area and does not consider environmental constraints or other county/state regulations which will reduce actual build out.

determined using the 1996 aerial photogrammetric maps. This provides a better understanding of the development potential if the existing zoning remains intact. (See Chart 2.) Several options for zoning changes were discussed as follows:

1. Status Quo - No changes to existing zoning.
2. Create a new zone that is tailored to the unique characteristics of the area.
3. Modify the RC 3 zone since it no longer has any merit as a deferred planning zone because public water and sewer will not be extended to serve the area. Convert it to a permanent zone with a density of .1 dwelling units per acre. There should be a building or impervious area coverage factor, vegetation removal limitations, and provisions for rural cluster subdivision and conservancy area requirements.
4. Modify the locational requirement for the RC 4 zone to allow its application to land that drains to the Patapsco River. While its many features such as the coverage factor, vegetation removal limitations, cluster option and conservancy area requirements are advantageous to the area, the .2 density cluster option may be too dense for the land, given the environmental constraints within the Patapsco River Valley Area.
5. Rezone areas within the plan area to zones that have a more appropriate density given the environmental constraints (such as steep slopes, streams, buffers, and erodible soils) and the winding nature of the area's roads.
6. Evaluate the issue of net density versus gross density, i.e. should the streams, 100 year floodplains and steep slopes in excess of 25% be excluded from the gross site area with the density calculated on the remaining net buildable site area. The resulting density would be more appropriate due to the environmental constraints of the area.

Since agricultural preservation remains a priority in the plan area, the existing RC 2 zoning should remain as mapped on the 1996 Comprehensive Zoning Maps. However, the remaining zoning options need additional study and evaluation, taking into consideration the environmental constraints and the possible density build out based upon the subdivisions that have been recorded. Zoning patterns within the plan area should be re-evaluated prior to the 2000 CZMP.

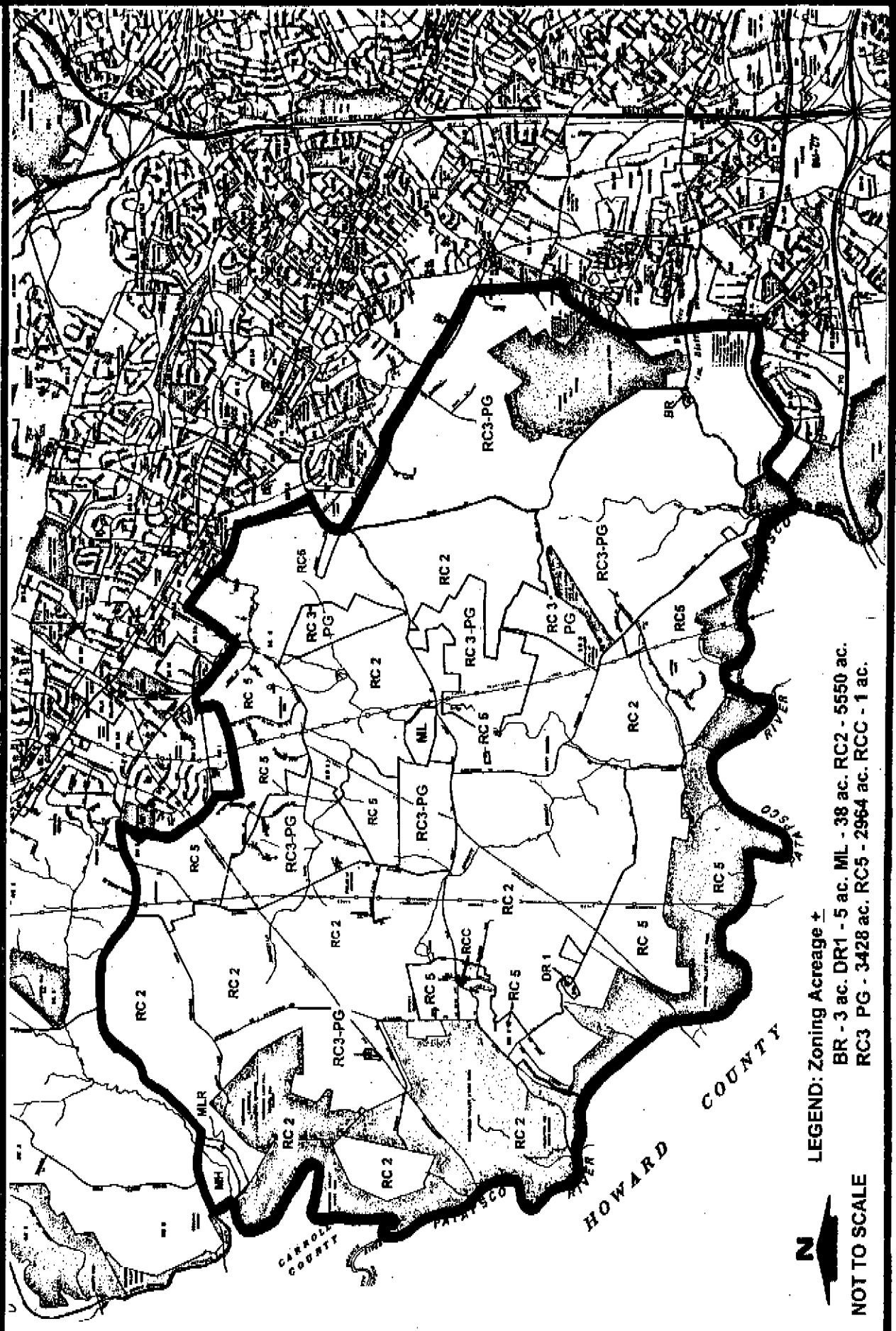
### **Ridge Road and Dogwood Road Area**

Additional study occurred in the eastern portion of the Patapsco/Granite Area Community Plan area. This area contains the Diamond Ridge Golf Course and the Western Area Park fronting on Ridge Road and Dogwood Road. To the southeast of the study area is the future Dogwood Road Elementary School located on 45± acres known as the Reiblich and Helfrich properties, the latter being the former Woodlawn Country Club. Also to the southeast is the Health Care Finance Administration (HCFA), an 883,140 square foot government office complex. The Rolling Road communities, located further east, contain a mix of townhouses, condominiums, apartments and single family houses in an area that is largely built-out with the exception of the proposed Windsor Commons development plan. The Security Employment Center, to the east and south of the Rolling Road communities, is one of the County's major employment centers containing office, warehouse and regional commercial uses. These uses include the Rutherford Business Center, the Windsor Corporate Park, the Meadows Industrial Park, the Security Square Mall and the Social Security Administration.



# Patapsco / Granite Area Community Plan

## Proposed Zoning Map



While the land use and zoning transition from the employment center to the medium and high density residential uses is a gradual one, the transition from the high and medium density housing to the rural community is an abrupt one with a hard edge at the Urban Rural Demarcation Line (URDL). However, the future Dogwood Road Elementary School and the park/golf course as institutional and open space uses form a good buffer between the high and medium density residential uses and the rural community. Additionally, there are serious environmental constraints, severe topography and infrastructure deficiencies, i.e. narrow, winding rural roads which make increased rural residential densities undesirable in this area.

### **RC 3 zone within the Plan area**

The RC 3 zone was established in this area in 1976 as a deferred planning zone. This zone should be modified and defined as a permanent rural zone, RC3-PG, to provide an improved transition from the rural Patapsco/Granite area to the higher density Rolling Road communities.

The new RC 3-PG zone is proposed as a rural conservation zone. This zone would reflect the severe environmental constraints in this area, such as soils that have severe constraints for septic fields, streams, 100 year flood plains, wetlands, severe topography and infrastructure deficiencies.

This rural zone would feature clustered rural residential development, while limiting impervious area and protecting natural vegetation. This method of subdivision site design emphasizes the importance of open space or conservancy areas and preservation of attractive natural features. A conservancy area is that portion of a development tract that will be preserved for open space. Areas with severe environmental constraints, including the land within the DEPRM forest buffers, would be put into conservancy areas. These areas could be publicly owned or owned by a home owner's association.

The conservancy area concept is designed to accomplish an interconnected system of open space on the eastern side of the Patapsco/Granite area. The Dogwood Road Elementary School tract could be connected to the Diamond Ridge and Woodlands golf courses and the Ben's Run greenway. It will result in an improved transition from the rural Patapsco/Granite area to the higher density Rolling Road communities by providing a greenbelt or buffer area, giving a more open character to the landscape while allowing reasonable rural development densities.

The new RC 3 - PG, Rural Conservation zone could be implemented during the 2000 Comprehensive Zoning Map Process.

## **RURAL DESIGN GUIDELINES**

Design Guidelines for new development are needed in order to preserve the area's unique rural character while allowing for reasonable rural growth. One set of guidelines is needed for steep, wooded sites and another set for open fields and farms. The items the design guidelines will cover involve the siting of new houses, protection of scenic views and corridors, protection of historic resources, tree preservation and fencing. The design guidelines should be adopted as an amendment to the Comprehensive Manual of Development Policies (CMDP).

The following roads are designated as Scenic Routes: Marriottsville Road from Granite Road to the Carroll County line, Davis Avenue in its entirety, Wright's Mill Road from Davis Avenue to Dogwood Road, Dogwood Road in its entirety, Old Court Road in its entirety, and Ridge Road in its entirety.

In addition to the standards for Scenic Routes found in the Comprehensive Manual of Development Policies, this plan will contain separate recommendations for Scenic Viewshed Analysis, to be submitted with the concept plan for review by the Office of Planning as part of the development review process.

Institutional forms of development such as houses of worship and schools are permitted by right or by special exception in the RC 2, RC 3 and RC 5 zones. While beneficial to the residents, the demands on the infrastructure may be more extensive than many other non-residential uses. In order to preserve rural character, these uses should be reviewed by the Baltimore County Design Review Panel, pursuant to Section 26-281(b) of the Baltimore County Code, and should be reviewed for compatibility with the surrounding neighborhood, pursuant to Section 26-282 of the Baltimore County Code. Special consideration should be given to architecture, scale, mass, fencing, landscaping and signage. Lastly, uncleared, landscaped buffers of 50 feet for any institutional building or parking lot will be required, consistent with those required in a residential transition area (RTA). The RTA should apply in all RC zones, between the new use and any off site single family houses that are located within 150 feet of the development tract boundary or vacant lots, less than 2 acres in area, on which a dwelling meeting all required setbacks can be erected.